



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,512	10/20/2000	Joel E. Short	042253/204722	7933
826 7590 08/20/2008 ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000				
EXAMINER DUONG, THOMAS				
ART UNIT 2145		PAPER NUMBER		
MAIL DATE 08/20/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/693,512

**Applicant(s)**

SHORT ET AL.

**Examiner**

THOMAS DUONG

**Art Unit**

2145

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8, 10-15, and 17-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 10-15, and 17-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/IC)
- Paper No(s)/Mail Date 1/7/08, 3/11/08, 7/3/08, 7/31/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



## DETAILED ACTION

### ***Response to Amendment***

1. This office action is in response to the Applicants' Amendment filed on May 9, 2008.  
Applicants amended *claims 8 and 14* and canceled *claims 1-7, 9, and 16*. *Claims 8, 10-15, and 17-18* are presented for further consideration and examination.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. *Claims 8, 10-15, and 17-18* are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta et al. (US006615212B1), in view of Meltzer et al. (US006226675B1), and in view of Low et al. (US005218605),
4. With regard to *claims 8, and 14*, Dutta discloses,
  - *a subscriber interface for adapting to subscriber computers that are connected to the gateway device to facilitate communications between the subscriber computers and at least one network; and* (Dutta, col.1, line 8 – col.16, line 17)  
Dutta discloses, “Turning now to FIGS. 6 and 7, there are shown block diagrams illustrating the data flow through a prior art transcoding proxy server. In FIG. 6,

*client 602 sends HTTP request 604 to transcoding proxy server 606.*

*Transcoding proxy server 606 includes transcoding framework 608 for converting requests in one format to requests in a second format. Transcoding framework 608 includes HTTP request transform plugin 610 for converting HTTP request 604 received from client 602 into a modified HTTP request 612 compatible with originating server 614, where the requested content is located. As shown in FIG. 7, transcoding proxy server 606 receives server response 702 in Extensible Markup Language (XML) data format. Transcoding framework 608 also includes XML to HTML transcoder plugin 704. XML to HTML transcoder plugin 704 converts server response 702 from XML data format to an HTML data format and sends HTML data 706 to client 602 for processing" (Dutta, col.7, lines 45-62).*

Hence, Dutta teaches of the transcoder framework 608 (i.e., Applicants' subscriber interface) located on the transcoding proxy server 606 (i.e., Applicants' gateway device) converting requests in one format to requests in a second format (i.e., Applicants' adapting to subscriber computers) and sending (i.e., Applicants' facilitating communications between) HTML data 706 to client 602 (i.e., Applicants' subscriber computers) from originating server 614 on a network (i.e., Applicants' at least one network).

- *an XML interface comprising a parser front end, a parser section responsive to the parser front end and a building section for communicating with an external device via a series of XML commands and responses such that the gateway device, located at a network access point, supports communications involving the subscriber computers and the external devices without requiring the subscriber computers to support XML commands and responses, wherein said parser front*

*end determines the type of operation requested by the external device; and*  
(Dutta, col.1, line 8 – col.16, line 17)

*Dutta discloses, "Turning now to FIGS. 6 and 7, there are shown block diagrams illustrating the data flow through a prior art transcoding proxy server. In FIG. 6, client 602 sends HTTP request 604 to transcoding proxy server 606.*

*Transcoding proxy server 606 includes transcoding framework 608 for converting requests in one format to requests in a second format. Transcoding framework 608 includes HTTP request transform plugin 610 for converting HTTP request 604 received from client 602 into a modified HTTP request 612 compatible with originating server 614, where the requested content is located. As shown in FIG. 7, transcoding proxy server 606 receives server response 702 in Extensible Markup Language (XML) data format. Transcoding framework 608 also includes XML to HTML transcoder plugin 704. XML to HTML transcoder plugin 704 converts server response 702 from XML data format to an HTML data format and sends HTML data 706 to client 602 for processing"* (Dutta, col.7, lines 45-62).

Hence, Dutta teaches of the transcoder plugin 704 (i.e., Applicants' XML interface) located on the transcoding proxy server 606 (i.e., Applicants' gateway device located at a network access point) receiving (i.e., Applicants' communicating) responses from the originating server 614 (i.e., Applicants' external device), converting server responses 702 from XML data format to an HTML data format (i.e., Applicants' via a series of XML commands and responses), and sending (i.e., Applicants' supporting communications) the resulting HTML data 706 to client 602 (i.e., Applicants' subscriber computers) from originating server 614 (i.e., Applicants' external device). Since, the

responses from originating server 614 already converted to HTML format by the transcoding proxy server, the client 602 (i.e., Applicants' subscriber computer) does not need to support XML (i.e., Applicants' without requiring the subscriber computers to support XML commands and responses).

- *an internal web server for communicating with both said XML interface and the Internet to thereby facilitate XML-based communications between the gateway device and external devices connected to the Internet.* (Dutta, col.1, line 8 – col.16, line 17)

Dutta discloses, *"Turning now to FIGS. 6 and 7, there are shown block diagrams illustrating the data flow through a prior art transcoding proxy server. In FIG. 6, client 602 sends HTTP request 604 to transcoding proxy server 606.*

*Transcoding proxy server 606 includes transcoding framework 608 for converting requests in one format to requests in a second format. Transcoding framework 608 includes HTTP request transform plugin 610 for converting HTTP request 604 received from client 602 into a modified HTTP request 612 compatible with originating server 614, where the requested content is located. As shown in FIG. 7, transcoding proxy server 606 receives server response 702 in Extensible Markup Language (XML) data format. Transcoding framework 608 also includes XML to HTML transcoder plugin 704. XML to HTML transcoder plugin 704 converts server response 702 from XML data format to an HTML data format and sends HTML data 706 to client 602 for processing"* (Dutta, col.7, lines 45-62).

Hence, Dutta teaches of the transcoder framework 608 (i.e., Applicants' XML interface) located on the transcoding proxy server 606 (i.e., Applicants' internal web server) converting requests in one format to requests in a second format

and sending HTML data 706 (i.e., Applicants' facilitate XML-based communications) to client 602 (i.e., Applicants' external devices) from originating server 614 on a network (i.e., Applicants' at least one network).

However, Dutta does not explicitly disclose,

- *an XML interface comprising a parser front end, a parser section responsive to the parser front end and a building section for communicating with an external device via a series of XML commands and responses such that the gateway device, located at a network access point, supports communications involving the subscriber computers and the external devices without requiring the subscriber computers to support XML commands and responses, wherein said parser front end determines the type of operation requested by the external device; and*

Meltzer teaches,

- *an XML interface comprising a parser front end, a parser section responsive to the parser front end and a building section for communicating with an external device via a series of XML commands and responses such that the gateway device, located at a network access point, supports communications involving the subscriber computers and the external devices without requiring the subscriber computers to support XML commands and responses, wherein said parser front end determines the type of operation requested by the external device; and* (Meltzer, col.1, line 7 – col.86, line 42)

Meltzer discloses, "A node in the commerce network establishes an interface for transactions according to the present invention that comprises a machine-readable specification of an interface, along with a machine-readable data structure that includes interpretation information for the machine-readable



*specification of the interface. The machine-readable specification of the interface includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for which the node acts as an interface. The definitions of the input and output documents comprise respective descriptions of sets of storage units and logical structures for sets of storage units, such as according to a standard XML based document. The machine-readable data structure that includes interpretation information according to various aspects of the invention includes data type specifications (e.g. string, array, etc.) for logical structures in the definitions of the input and output documents, content models (e.g. lists of possible values) for logical structures and/or data structures that map predefined sets of storage units for a particular logic structure to respective entries in a list in order to provide a semantic definition of logical structures (e.g. mapping codes to product names)" (Meltzer, col.3, line 55 – col.4, line 10). Hence, Meltzer teaches of interpreting and translating information between documents with respect to data type specifications, content models, and data structures (i.e., Applicants' via a series of XML commands and responses).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Meltzer with the teaching of Dutta to "[facilitate] interaction amongst diverse platforms in a communication network. Such system should facilitate spontaneous commerce between trading partners without custom integration or prior agreement on industry wide standards. Further, such systems should encourage incremental path to business automation, to eliminate much of the time, cost and risks of traditional systems integration" (Meltzer,

col.2, lines 18-25). Dutta discloses, "However, much of the information now available on the Web are legacy files created before the proliferation of the Internet and the Web. These files are often very large and were not created with the thought that they might someday be transmitted back and forth across the Internet. These files can take a very long time to transmit over the Web, and it can also take a very long time to transcode their contents into a different data format. Therefore, there is a need for an improved method of transcoding data formats and sending information across the web to minimize transmission times" (Dutta, col.2, lines 26-35).

However, Dutta and Meltzer do not explicitly disclose,

- an XML interface comprising a parser front end, a parser section responsive to the parser front end and a building section for communicating with an external device via a series of XML commands and responses such that the gateway device, located at a network access point, supports communications involving the subscriber computers and the external devices without requiring the subscriber computers to support XML commands and responses, wherein said parser front end determines the type of operation requested by the external device; and

Low teaches,

- an XML interface comprising a parser front end, a parser section responsive to the parser front end and a building section for communicating with an external device via a series of XML commands and responses such that the gateway device, located at a network access point, supports communications involving the subscriber computers and the external devices without requiring the subscriber computers to support XML commands and responses, wherein said parser front

end determines the type of operation requested by the external device; and (Low, col.1, line 5 – col.18, line 12)

Low discloses, "FIG. 9 shows a detailed representation of a preferred embodiment of the symbol interpreter module 314. A front parser module 902 receives the composite data from the pipe module 310, and distributes this composite data to "CHK" modules (904, 910, 914), to determine the type of composite data received." (Low, col.15, lines 5-10). Low discloses, "A CHK.sub.-cmd sub-module 910 checks the composite data received by the symbol interpreter module 314 to see if the composite data is an RD/RT command. If the CHK.sub.-cmd sub-module 910 determines that a command has been received, it sends the command to a CMD.sub.-- parser sub-module 912, which verifies that a correct command was, in fact, received. The CMD.sub.-- parser sub-module 912 then sends the command to the appropriate sub-module in the command processor module 316 for processing" (Low, col.15, lines 23-32). Hence, Low teaches of a front parser (i.e., Applicants' parser front end) determining (i.e., Applicants' determine) the type of composite data which includes determining the command (i.e., Applicants' type of operation) requested.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Low with the teaching of Dutta and Meltzer to "[facilitate] interaction amongst diverse platforms in a communication network. Such system should facilitate spontaneous commerce between trading partners without custom integration or prior agreement on industry wide standards. Further, such systems should encourage incremental path to business automation, to eliminate much of the time, cost and risks of traditional systems integration"

(Meltzer, col.2, lines 18-25). Dutta discloses, *"However, much of the information now available on the Web are legacy files created before the proliferation of the Internet and the Web. These files are often very large and were not created with the thought that they might someday be transmitted back and forth across the Internet. These files can take a very long time to transmit over the Web, and it can also take a very long time to transcode their contents into a different data format. Therefore, there is a need for an improved method of transcoding data formats and sending information across the web to minimize transmission times"* (Dutta, col.2, lines 26-35). Low discloses, *"Once the CHK.sub.-- key sub-module 914 has determined that the composite data sent to the symbol interpreter module 314 is input data, it then determines which input device 110 the data has been sent by, and directs the composite data to one of three sub-modules (916, 918, 920), which translate the composite data into a format recognizable by the remote device 108"* (Low, col.15, lines 37-44).

5. With regard to claims 10-11 and 17-18, Dutta, Meltzer, and Low disclose,
- *wherein said parser section organizes elements parsed from at least one of an XML command and an XML response into separate XML parameters and passes at least some of the organized elements to a requested application.* (Dutta, col.1, line 8 – col.16, line 17; Meltzer, col.1, line 7 – col.86, line 42; col.21, lines 47-52, lines 60-64; col.23, lines 46-53; module 304 on sheet 3, fig.3; module 404 on sheet 4, fig.4; Low, col.1, line 5 – col.18, line 1).
  - *wherein said parser section also nests the elements to be passed to the requested application within an application programming interface (API) wrapper.*

(Dutta, col.1, line 8 – col.16, line 17; Meltzer, col.1, line 7 – col.86, line 42; col.25, line 66 – col.26, line 8; module 515 on sheet 5, fig.5; Low, col.1, line 5 – col.18, line 1).

7. With regard to claims 12-13, Dutta, Meltzer, and Low disclose,
- *wherein said building section prepares responses to requests received by the gateway device.* (Dutta, col.1, line 8 – col.16, line 17; Meltzer, col.1, line 7 – col.86, line 42; col.23, lines 23-28, lines 53-60; modules 406-407 on sheet 4, fig.4; Low, col.1, line 5 – col.18, line 1).
  - *wherein said building section assembles results returned by a requested application into an XML response.* (Dutta, col.1, line 8 – col.16, line 17; Meltzer, col.1, line 7 – col.86, line 42; col.23, lines 23-28, lines 53-60; modules 406-407 on sheet 4, fig.4; Low, col.1, line 5 – col.18, line 1).
8. With regard to claim 15, Dutta, Meltzer, and Low disclose,
- *wherein receiving an XML command comprises receiving an XML command at the gateway device from a billing and content server* (Dutta, col.1, line 8 – col.16, line 17; Meltzer, col.1, line 7 – col.86, line 42; col.21, line 64 – col.22, line 2; modules 305-307 on sheet 3, fig.3; Low, col.1, line 5 – col.18, line 1).

#### ***Response to Arguments***

9. Applicants' arguments with respect to *claims 8 and 14* have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
  
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

/Thomas Duong/

Patent Examiner, Art Unit 2145

Art Unit: 2145

*August 23, 2008*

*/Patrice Winder/*

*Primary Examiner, Art Unit 2145*